



From the Medical Director's desk

Dear Colleagues,

HAPPY
new year

Greetings from Kanchi Kamakoti CHILDS Trust Hospital!

Welcome to this edition of our newsletter, where we bring you the latest updates, insights, and events that inspire and inform. This platform reflects our shared commitment to excellence, compassion, ethics and innovation showcasing achievements, milestones and the collective spirit that drives us forward.

It highlights the dedication and passion of our team. As always, your support and feedback is invaluable in making this journey more enriching.

Dr.Janani Sankar, Medical Director, KKCTH



ACADEMIC EXCELLENCE

Dr.Mahalakshmi, DNB PG, won the 2nd prize in Oral paper presentation at the National Pediatric Critical care conference, Pedi-CRITICON held on 15th and 16th December 2024, at Chennai. **Dr. Lavanya Devi, DNB PG** won the first prize for E-poster - PG category. **Dr.Arathi Wilson, DrNB PICU PG**, won the 2nd prize in E-poster, Young intensivists Category



Our Infection control Nurses, **Mrs Arokia Sophie.R and Mrs Amutha.R**, won the first prize at the National level **BD Mastermind quiz** held at the 12th Infusion Nurses Society Conference held on 30th November 2024 at Yashoda hospital, Hyderabad

Dr Kalaimathi.M, final year DNB postgraduate was awarded the Merit certificate at the prestigious **Dr.J.V.Medal exam** held at Madurai Medical College on 22nd November 2024.

Dr Mounika B, second year DNB Ped PG has won the second price at the **National level online quiz on "Non Communicable Diseases and their Prevention"** conducted by NCDPA chapter of IAP 2024 and won **second place** in Play along round of National level Pediatric Infection Diseases conducted as a part of **NCPID 2024** held at Indore on 9th November 2024.

Dr Ezhilpriya S final year DNB PG has won the **second prize for her paper presentation at NCPID 2024** for titled **"Microbiological Profile with their Anti Microbial Sensitivity among Neonatal Sepsis Cases"** held at Indore on 9th November 2024

Dr T Gauthami 3rd year DrNB Pediatric Surgery PG has won the **second prize** for the **Best paper** at the **50th Indian Association Pediatric Surgeons Conference (APSCON) 2024** titled **"Obstructive Uropathy in Pediatric Oncology Patients"** held at AllMS Rishikesh between 6th and 10th November 2024.

Hearty congratulations to our final year postgraduates -Dr.Karthik.S,Dr.Haritha,Dr.Ezhilpriya, Dr.Kalaimathi, DrAswini and Dr.Nilofer for clearing DNB Pediatrics exam.



Hearty congratulations to our NICU nurses, Ms.Daphene Merylyn and Ms.Priya.R for clearing NNF Nursing Neonatology fellowship exit exam meritoriously.

WOMEN AND CHILD HEALTH

The department had a fertile stretch with an array of clinical, academic and social activities conducted. We conducted academic programs such as **Shikshana (CME program for PG's)** on Rh isoimmunization and also the very first Patient safety program on **"Nursing made safe"** on fall prevention for the staff nurses from across the city. They were both well attended and appreciated.

Doctors from our department were part of **holistic medical camp conducted for the adolescent girls** of Perambur girls' higher secondary school.



Close to 150 girls were screened for anemia and menstrual disorders. They were also educated on menstrual health and hygiene. We also actively conducted Public forums for the patients in KKCTH to spread awareness on anemia and breast cancer screening. We are very proud to have conducted breast cancer screening for our very own 60 KKCTH employees in collaboration with **"India Turns Pink"** a non-profit organization offering breast cancer screening with their **iBreastExam** device to women in India.



Inauguration of Labour Suite

True to our aim of providing a one stop destination of women's health issues, we not only **delivered 4 high-risk mothers safely**, but also conducted other surgeries such as staging laparotomy for endometrial cancer, suction and evacuation and cervical cerclage. One of the antenatal mothers was referred in as in-utero in view of preterm pregnancy in labour (29weeks). It was heartening to see her to get discharged with a healthy baby – this was only possible due to the combined efforts of our department and NICU.



You can always reach us out for obstetric and gynaecology emergencies on +9940408163 or 42001800



RECENT UPGRADATIONS



Neurosurgical Operating Microscope by Carl Zeiss (Germany) and CUSA (Cavitron Ultrasonic Aspirator from USA) was inaugurated by donor Mrs. Radhika Vardhman Jain on 29th October 2024

In order to jointly promote skill training in Research Procedures, Computational Skill Development, Digital Marketing and help bridge the gap existing between **Academic Learning and Health Care Development, Stella Maris College Chennai** and the units of **The CHILDS TRUST (CTMRF-KKCTH)** entered into a Memorandum of Understanding on 04.11.2024 to work together for a brighter, healthier future.



Inauguration of the new Samsung digital Radiography suite, donated by Maithan Alloys, Kolkata on 10th December 2024

Pediatric Rehabilitation unit at KKCTH



Pediatric rehabilitation unit at KKCTH in collaboration with NICE team has begun its services from APRIL 2024. **You can always reach out to us at +91 75388 42737 nicerehabilitationsservice@gmail.com**

KNOWLEDGE SNIPPETS



A child with mediastinal mass: Do's and Don'ts



Fig 1: Chest x-ray showing mediastinal mass

A 3-year-old boy presented with a 2-week history of fever and noisy breathing for 1 week, and facial puffiness that had developed over the past 5 days. He had a strong preference for an upright position, refusing to lie down.

On examination, the child was tachypneic and had stridor, facial puffiness, and enlarged chest wall veins, while maintaining adequate oxygen saturation.

Red flag signs such as unexplained stridor, facial congestion, and the refusal to lie down in supine position raised concern for a mediastinal mass, prompting further evaluation. A chest X-ray subsequently confirmed the presence of a mediastinal mass.

To obtain a diagnosis in a child with a mediastinal mass: Avoid invasive procedures, consider minimal diagnostic methods. A careful examination of the CBC and peripheral smear is crucial, as the presence of atypical cells may provide important diagnostic clues and help avoid invasive procedures.

Precautions to prevent respiratory compromise in children with "Mediastinal Mass"

- Avoid supine position: Placing the patient supine can precipitate respiratory arrest.
- Do not sedate: Sedation can compromise airway patency and respiratory function.
- Avoid anxiolytics: These can also affect respiratory drive and muscular tone.
- Prevent any intervention that compromises muscular tone or venous return: This is crucial in an already compromised cardiopulmonary state.



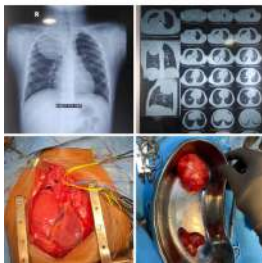
SUCCESS STORIES



STORY OF SUCCESSFUL MEDIASTINAL MASS EXCISION

Dr Priya R, Dr Harun, Dr Arathi S, Dr Kanimozhi, Dr Jayanthi Dr Kokilavani, Dr Shivakumar

4 year 8 month old, well thriving male child, presented with recurrent URI symptoms for 1.5yrs and was evaluated elsewhere in 2023. There were no other associated symptoms. **X ray chest (2023)- was s/o mediastinal mass.** Tumor markers (2023) were negative was advised for surgery, but was lost for follow up. Child was referred here for further management after a year. Symptoms persisted, hence was reevaluated. **CECT chest (23.9.2024)- showed a well defined soft tissue mass of 9.5* 6.7* 6cm in right paravertebral region of upper mediastinum extending to lower neck at C5- T5 level.** Trachea pushed to left side without significant compromise of airway. Brachiocephalic trunk, right common carotid artery, right subclavian artery, right internal jugular vein, subclavian vein & brachiocephalic vein mildly pushed anteriorly without significant infiltrations or narrowing- **suggestive of Neuroblastoma/ Ganglioneuroma.**



Xray chest showing mediastinal mass, CECT chest, intra-op pictures of mass lesion

Urinary VMA was slightly elevated. . On 28.9.2024, under GA, initially TNFL was done to assess the airway TNFL- showed normal vocal cords & subglottis. Indentation in the anterolateral wall of mid and lower trachea by mass & compression of right main bronchus by the mass was noted. Rest of the airway was normal. After airway evaluation, proceeded with midline sternotomy. Muscles divided, thymus gland dissected & retracted. Pericardium opened & posterior mediastinum entered. Right lung retracted down & mass identified. Mass dissected all around, medially, mass was closely adherent to major vessels; carefully dissected. Superiorly the mass extending into the neck was dissected & the mass excised in toto. After excision, two ICD tubes were placed. Postoperatively, child was managed initially in the PICU for 2 days, later shifted to ward. Oral feeds were established on day of surgery. Chest tubes were removed on POD-2. Child remained hemodynamically stable and was discharged on POD-4. Post-operative Xray chest showed mild right upper lobe atelectasis; no residual mass with trachea in midline. **HPE- was suggestive of Ganglioneuroblastoma-intermixed type. IHC: CD 45 positive in lymphoid aggregates, NSE- strong positive, Ki67: 2-3%.PET- CT (8.10.2024)- post surgical changes seen in surgical site with no residual lesion. Bone marrow biopsy- normal. N-Myc amplification- Negative. Child recovered well. Hence, he was reassured and advised for follow-up in 6 months.**



ACADEMIC ACTIVITIES



The National Neocon 2024 - pre conference ventilation workshop "All about Ventilation- Basic to advanced" was conducted at **KKCTH** on the 4 and 5 th of December 2024- had distinguished faculty from prestigious institutions from all over the country including Dr.N.Chandrakumar, HOD, Neonatology and Dr.V.Vaanathi, Senior Neonatologist, KKCTH. There were over 40 delegates from all over the country.



PEDICRITICON 2024 had a grand launch in Chennai with 12 workshops in different venues and 3 days of full-blown academic sessions with one hall fully dedicated to paediatric post graduate students and practising paediatricians on all three days. The conference as a whole was well received.

Dr Bala Ramchandran, HOD PICU of KKCTH was the organising chairman of the conference whose efforts were clearly reflected in the way the conference was moving forward seamlessly. The man behind every scene of PICU of KKCTH, Dr K Ravi Kumar had his share of contribution by being the active member of scientific, sponsorship and finances committee. **KKCTH had its contribution by conducting "PICU liberation workshop" – the first ever of its kind in India.** Dr Sudeep Kumar also had his share being the local co-ordinator for the workshop, being an integral part of the abstracts committee and the souvenir editor. In addition to the above, our hospital medical director, Dr Janani, Dr Ramesh (HOD anaesthesia) and Dr Radhika (Consultant- In charge ER) were also active members being faculty at the conference.



Pediatric Surgery Day was celebrated on **29th December 2024.** Quiz for Pediatric postgraduates and Nurses along with teaching session for Nurses was conducted by Senior Consultants and DNB surgical residents from Pediatric surgery department.



Dr.Priya Ramachandran, HOD, Dr.Lakshmi.S , Senior consultant, Dr.Balagopal.S, Senior Consultant

Faculty, Department of Paediatric Surgery -KKCTH



Acetaminophen (Paracetamol) blood level test

Dr. V. Priyadharshini. M.D (Biochem), HOD-Clinical Biochemistry lab, KKCTH

Acetaminophen, commonly known as paracetamol, is an easily available over-the-counter analgesic and antipyretic. Risk of toxicity occurs during overdose or chronic use. Severe acetaminophen toxicity may cause acute liver failure, renal disorder, or death. Toxicity must be suspected in patients presenting with history of acute overdose, chronic ingestion of supratherapeutic doses or febrile illness presenting with elevated liver enzymes along with history of repeated paracetamol ingestion. Major portion of Acetaminophen (90-95%) gets metabolized by conjugation (with glucuronide and sulphate) in the liver and the resulting conjugates get excreted in urine. A minor fraction (5-10%) is metabolized by cytochrome P450 enzyme system in liver, that produces N-acetyl-para-benzoquinone imine (NAPQI), a highly reactive intermediate metabolite that can cause oxidative damage to cellular proteins. NAPQI gets detoxified by conjugation with glutathione (a cellular antioxidant) and gets excreted in urine. N-acetyl cysteine (NAC) is the primary antidote to treat acetaminophen toxicity and acts by replenishing glutathione and also by directly neutralizing NAPQI. Anti-dote therapy with N-acetylcysteine (NAC) is most effective if started within 8 hours of overdose to prevent hepatotoxicity. Acetaminophen blood level is the only reliable diagnostic test for early detection of its toxicity, as in acute overdose, patients may have few or no symptoms initially and clinical evidence of hepatic injury occurs only after 24 hours.

Acetaminophen blood level test, is offered **24x7** at the Clinical Biochemistry Laboratory of Kanchi Kamakoti CHILDS Trust Hospital (KKCTH). The lab is a referral centre for acetaminophen blood level test and performs the test 24x7 using **EMIT** (enzyme multiplied immunoassay technique), in fully automated chemistry analyser. The results are made available at the shortest turnaround time and all critical acetaminophen level results are readily communicated to the treating physicians, thus helping in prompt management of toxicity.

Blood sample for the acetaminophen blood level test must be collected in **red top serum tube** and **serum must be separated within 2 hours of sample collection** and **transported at 2-8°C**. Acetaminophen blood levels must be typically measured at least 4 hours after drug ingestion to ensure that absorption and distribution of drug is complete.

For further details contact Clinical Biochemistry Lab, KKCTH: 044-42001800 Extn 132

MARK YOUR CALENDERS!!

Kanchi Kamakoti CHILDS Trust Hospital
Department of Neonatology & Department of OBGYN

COME AND JOIN OUR ANNUAL CME ON
PERINATOLOGY
Bridging the gap between mother & baby
Conference highlights

- Conducted by Obstetricians and Neonatologists
- Interactive workshop on CTG-practical issues and management
- Scientific session on recent updates, controversial topics and clinical dilemmas
- Multidisciplinary panel on common perinatal clinical scenarios

08/02/25: CTG workshop (1pm to 4pm)
09/02/25: Scientific session (9am to 4pm)